

JAN 25 2006

K 052812

## 510(k) Summary of Safety and Effectiveness

**Applicant Name and Address:** Collagen Matrix, Inc.  
509 Commerce Street  
Franklin Lakes, New Jersey 07417

**Contact Person:** Peggy Hansen, RAC  
Director, Clinical, Regulatory, and Quality Assurance  
Tel: (201) 405-1477  
Fax: (201) 405-1355

**Date of Summary:** December 21, 2005

**Device Common Name:** Bone Grafting Material  
Bone Void Filler

**Device Trade Name:** OssiMend™ Bone Graft Material

**Device Classification Name:** Filler, Bone Void, Calcium Compound

**Regulation Number:** 888.3045

**Device Class:** Class II

**Product Code:** MQV

**Predicate Device(s):** HEALOS® Bone Graft Material, K012751  
CopiOs™ Bone Void Filler, K033679  
Collagraft Strip Bone Graft Matrix, K000122  
Vitoss® Scaffold Foam Bone Graft Material, K032288  
ORTHOSS™ Resorbable Bone Void Filler, K014289  
OsteoGuide® Anorganic Bone Mineral Products, K043034

### Description of the Device

OssiMend™ Bone Graft Material (OssiMend) is a collagen mineral composite matrix processed into strips, pads, or granular form for surgical implantation. The principle components of OssiMend are bovine type I collagen and anorganic bovine bone mineral. The mineral particles are dispersed within collagen fibers forming a three-dimensional open porous matrix consisting of 55% bone mineral and 45% collagen. OssiMend is provided as a sterile, dry material that is hydrated with autogenous bone marrow at the point of use. OssiMend strips and pads can be cut into shapes and are designed to retain their shape and physical integrity following implantation into a bony site, while the granular form can be molded to fit the bone defect. OssiMend is fully resorbed during the natural process of bone formation and remodeling.

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OssiMend™ Bone Graft Material

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**Intended Use**

OssiMend, combined with autogenous bone marrow, is intended for use in filling bony voids or gaps of the skeletal system (i.e., extremities, spine, and pelvis) that are not intrinsic to the stability of the bony structure. These defects may be surgically created osseous defects or osseous defects resulting from traumatic injury to the bone.

**Summary/Comparison of Technical Characteristics**

OssiMend and its predicates have the same technological characteristics. In particular, OssiMend and their predicates are the same with respect to intended use, design, materials, material characterization, form, and sizes.

**Safety**

OssiMend has been evaluated by a number of tests to assess its safety/biocompatibility. The device passed all selected FDA Blue Book Memorandum G95-1 and ISO 10993-1 testing for the biological evaluation of medical devices.

**Effectiveness**

The characteristics of the OssiMend meet the design requirements for an effective bone grafting material, and an animal study confirmed the effectiveness of the product for use as a bone void filler.

**Conclusion**

The results of the *in vitro* product characterization studies, *in vitro* and *in vivo* biocompatibility studies, and an animal study show that OssiMend Bone Graft Material is safe and substantially equivalent to its predicates.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JAN 25 2006

Ms. Peggy Hansen, RAC  
Director, Clinical, Regulatory, and Quality Assurance  
Collagen Matrix, Inc.  
509 Commerce Street  
Franklin Lakes, New Jersey 07417

Re: K052812/S1

Trade/Device Name: OssiMend™ Bone Graft Material  
Regulation Number: 21 CFR 888.3045  
Regulation Name: Resorbable calcium salt bone void filler device  
Regulatory Class: II  
Product Code: MQV  
Dated: December 22, 2005  
Received: December 23, 2005

Dear Ms. Hansen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



for Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K052812

Device Name: OssiMend™ Bone Graft Material

Indications for Use:

OssiMend, combined with autogenous bone marrow, is intended for use in filling bony voids or gaps of the skeletal system (i.e., extremities, spine, and pelvis) that are not intrinsic to the stability of the bony structure. These defects may be surgically created osseous defects or osseous defects resulting from traumatic injury to the bone.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

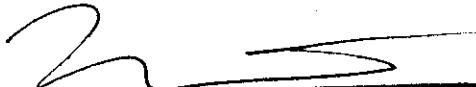
AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of General, Restorative,  
and Neurological Devices

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